

Delivering Frontline Medical Care Amidst Wartime Dangers: IDF Advanced Routine Healthcare Services During Operation Roaring Lion

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Introduction

- Delivering advanced healthcare services at the tactical edge during high-intensity combat operations is operationally complex but essential for maintaining force readiness and resilience.
- During Operation Roaring Lion, the IDF deployed forward-based physiotherapy, mobile dental care, and specialist consultation services in high-threat operational environments.
- These services were designed to provide advanced routine medical support close to maneuvering forces while minimizing evacuation needs and preserving operational continuity.
- The study evaluated the effectiveness, safety, feasibility, and operational implications of delivering advanced frontline medical services during active wartime conditions.

Methods

- Mixed-methods study integrating quantitative operational metrics with qualitative interviews from frontline medical staff and maneuver commanders.
- Quantitative outcomes included service utilization, patient satisfaction, safety incidents, personnel mobilization, and indicators of readiness in high-threat environments.
- Qualitative data were collected through in-depth interviews with 13 medical personnel and commanders regarding operational challenges, protection measures, competency gaps, and logistical considerations.
- Analysis focused on frontline implementation of physiotherapy, dental care, and specialist consultation capabilities at the tactical edge during large-scale combat operations.

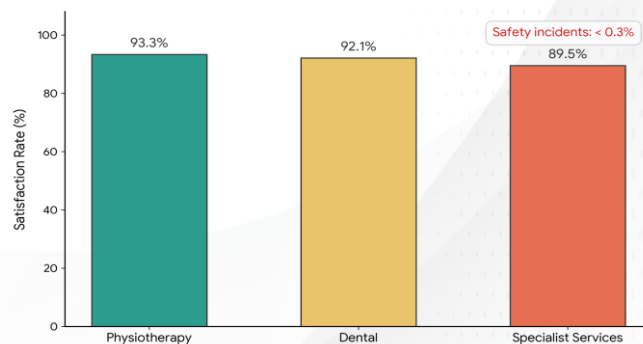
Conclusions

- Forward deployment of advanced physiotherapy, dental, and specialist services was feasible, safe, and achievable with minimal additional operational risk.
- Successful implementation depended on robust force-protection measures, streamlined logistics, and close coordination with operational commanders.
- These services contributed to sustaining combat readiness, operational continuity, and perceived warfighter resilience during large-scale combat operations.
- Future efforts should focus on developing tailored performance and outcome metrics, alongside enhanced training and risk-mitigation frameworks for advanced frontline medical care.

Results

- Satisfaction with frontline physiotherapy, dental, and specialist services exceeded 90%, while safety incidents remained negligible throughout operations.
- Voluntary engagement and mobilization of unpaid medical personnel reached 100%, demonstrating exceptionally high provider commitment during wartime deployment.
- Forward deployment of advanced medical services was operationally feasible and highly valued by warfighters for maintaining resilience and combat readiness.
- Direct measurement of clinical effectiveness and operational impact in active combat settings remained difficult due to the extreme and dynamic operational environment.
- Completion of qualitative analyses yielded five themes, as shown below.

Patient Satisfaction Across Frontline Services (n = 201 soldiers)



Five Key Themes



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